**Syllabus subtopic:** Development, Bio diversity, Environment, Security and Disaster Management.

**News:** The 2019 Brown to Green Report has been published by the Climate Transparency partnership, an international research collaboration.

- The report is the most comprehensive review of G20 countries’ climate performance, mapping achievements and drawbacks in their efforts to reduce emissions, adapt to climate impacts and green the financial system.

**For Prelims focus:** Key findings of the report.

**For Mains focus:** Concerns and challenges and ways to address them.

**Key highlights of the report:**

1. **Carbon emissions** from the world’s 20 biggest economies, including India, are rising.
2. None of the G20 countries have plans that will help them achieve the target. Many of the current 2030 climate targets under the Paris Agreement (Nationally Determined Contributions or NDCs) are too weak, with about half of the G20 countries projected to meet or overachieve their inadequate NDCs.
3. **Energy-related carbon dioxide emissions in G20 countries shot up** by 1.8 per cent in 2018 due to rising energy demand.
4. **Energy supply is not getting cleaner:** despite a more than five per cent rise in G20 total renewable energy supply in 2018, the share of fossil fuels in the G20 energy mix remains at 82 per cent.
5. While renewables now account for 25.5 per cent of power generation, this is not sufficient to outweigh the growth of emissions from fossil fuel sources.
6. Low-carbon fuels need to increase roughly 10 times by 2050 to keep global warming below 1.5 degrees Celsius.
7. **G20 emissions in the building sector grew more than in any other sector** in 2018 (4.1 per cent). Retrofitting existing buildings challenges all G20 and especially OECD countries. New buildings have to be near zero-energy by 2020-25 to keep global warming below 1.5 degrees.

**India specific observations:**

- Among the G20 countries, India has the most ambitious NDC. However, it still needs real action now to prepare the different sectors for stringent emission reductions.
- In the power, India is currently investing most in renewable energy, while Brazil and Germany are the only G20 countries with long-term renewable energy strategies.
- India and China are among the G20 countries with the most progressive energy efficiency policies.
Need of the hour:

1. To keep the Paris Agreement’s 1.5 degrees goal within reach, G20 countries will have to increase their 2030 emission targets by 2020 and significantly scale up mitigation, adaptation and finance over the next decade.
2. Coal needs to be phased out by 2030 in Organisation for Economic Co-operation and Development (OECD) countries and by 2040 globally.
3. G20 countries need to scale up their policies to ban new fossil fuel cars by 2035 at the latest, reduce emissions from freight transport to net-zero by 2050 and shift towards non-motorised and sustainable public transport.
4. Cutting government subsidies to the aviation sector, taxing jet fuel and using revenues to invest massively in new carbon free fuels would leverage huge emissions reductions and health benefits.
5. A coal phase-out plan is needed in Australia, China, India, Indonesia, Japan, Mexico, Russia, South Africa, Turkey and the US.